

## **Data Analytics – A critique of the appropriation of a new measure of ‘Student Engagement’.**

Student Engagement has begun to mean many things to many people over the past decade (REACT, 2017), as university staff and students have witnessed and championed new way of working with each other as stakeholders of Higher Education (HE). As noted by Dunne (2016), there is now a plethora of roles and initiatives where students are engaged to make change, co-design, conduct research and work in partnership in HE. I see these roles as part of a positive move of increasing student involvement into new capacities, as fellows of our shared HE community and even as partners in the educational landscape.

However, the growth of new roles and initiatives has led to confusion along the way. The term ‘Student Engagement’ alone is incredibly debated (Finn, Zimmer, 2012) and it has been accelerated into policy (QAA, 2013, BIS, 2011). This lack of clarity over definition may leave behind students and staff who begin to see the term as a ‘slippery concept’ (Gibbs, 2016, Shaw, 2016). At seminars and conferences, I still find myself in sessions addressing questions such as “what is an engaged student”, “what is not an engaged student?” and “what is Student Engagement?”

This opinion piece, however, has been inspired through witnessing an increasing new use of the term ‘Student Engagement’ with regards to data analytic initiatives increasingly rolled out across UK Universities, as means to track students’ interactions with online services, curricula, attendance monitoring and even visits to campus. This is a new use for a term, which many RAISE members will see not as Student Engagement in a chapter B5 understanding of the term (QAA, 2013), but as possibly the first of many appropriations of the term for alternative means (Bryson, 2017).

Kuh (2001) outlined the initial work and following analysis of the National Survey of Student Engagement in North America (USA and Canada), which is a survey that assesses Student Engagement in a ‘learning and teaching’, curriculum and student experience (Kuh, 2001). This survey inspired further literature assessing and enhancing Student Engagement in academic programmes or with Faculty (Kandiko Howson and Buckley, 2016). The UK Student Engagement movement took the term to a new level from Bryson and Hand 2007 and NUS/HSBC 2009, outlining that Universities should engage students in decision making (NUS/HSBC, 2009). This evolved into a way of working, engaging students in change, co-design and beyond (El Hakim et al, 2016, Seale, 2016, Wait and Bols, 2015, Bryson, 2014). For my involvement in a recent HEFCE funded project, we addressed Student Engagement as these ‘roles’ or initiatives, where students were engaged as Student Engagement activities. However, in other roles, such as an elected Student Union elected officer, I have viewed an engaged student as every student who is enrolled at University, as they are all engaging in one form of the University experience.

In 2016, the UK HE sector saw the whirlwind created by the introduction of the Teaching Excellence Framework, which now measures institutions on their retention rates in addition to what was previously only on student satisfaction and research (BIS, 2016). HEIs are increasingly concerned about rates of withdrawal, student employability and student demographic, in addition to the existing considerations of satisfaction. As a response to the TEF, there is growing use of data analytics systems to assess student engagement with campus services, attendance and enrichment activities, as a means to creating early warning signs and scores of students' engagement at University. These initiatives aim to allow a HEI to intervene to possibly prevent students dropping out who are engaging less or to remind students to engage with employability/extra-curricular activities to improve their graduate employability. The use of these systems also supports the implementation of attendance regulations for Tier 4 visa holders and an increase in pressures for campus safety. Therefore the argument for data analytics initiatives is to assess 'student engagement' and interactivity on campus has several pull factors for institutions.

These developments have lead me to query whether using data analytics for assessing how much students are engaged by turning up to class, accessing support services, enrichment services and extra-curricular activity is a measure of Student Engagement? This depends on your understanding of and what your context views as 'Student Engagement', or an engaged student, to whether it is a measure of not. If I take my personal understanding of Student Engagement, which is participation in any activity and interaction relating to the University (Shaw, Lowe, 2017), these activities discussed above would be a 'measure'. However, using a Chapter B5 co-curricular understanding of the phrase, which is in line with much of the literature surrounding current Student Engagement activity in educational enhancement, the above indicators would not apply. However, for the strategic purposes such as attendance assessment and student interaction with services, data analytics would provide a statistic or 'score' for each student, possibly compiling all of their engagements/engagement, deeming and ranking how engaged they are at the HEI.

Interesting as an idea, but concerning too, for this development creates new assumptions of what Student Engagement means, which practitioners may not agree with. Furthermore, if we consider the North American literature inspired by the National Survey on Student Engagement, this would disagree with a students' mere attendance suggesting they were engaged, as that student could be silent, not engage with debates and curriculum and could still drop out of the HEI. Therefore, when these debates and statistics are revealed, which are supposedly representative of an individual's engagement with the University experience as a whole, here are some initial thought provoking questions to consider:

- If a student is defined as highly engaged with a high attendance record and interactions with extra-curricular activities – does that mean that they are less likely to drop out?

- If a student is defined as not engaging, shown through a statistical low attendance and low interactions with extra-curricular activities, does that mean they are less likely to be satisfied with their HE experience?
- If a student is not engaging with a low attendance and low interactions with extra-curricular activities – does that mean they are at risk of dropping out and/or failing?
- What does it mean if a student is highly engaged in extra-curricular activities, but not with their programme?

We all already know that there can never be any single ‘magic bullet’ deterrent from students dropping out of Higher Education or becoming dissatisfied. Especially when assessing so many engagement points or considering the variables for each individual students in such large populations, each with their own set of unique circumstances and commitments. In my opinion, I have observed that often a practitioner, academic or professional service colleague will deem whether the student is engaged based on that student’s engagement with their own respective activities. However, from my Student Union background, I have always persuaded colleagues to take a holistic view, reminding colleagues that a student disengaged in one form of engagement may be very engaged elsewhere – which is fine!

So is this use of the term of ‘Student Engagement’ appropriate for these projects? I am reminded of two papers that have influenced my work in regards to Student Engagement. Astin’s work confirms that a highly involved student is more likely to be satisfied with their student experience (Astin, 1984), and Thomas’ work on belonging, stating that a student who is engaged is less likely to drop out and have a higher sense of belonging (Thomas, 2012). These papers were built upon by the REACT research project, concluding that highly involved students in co-curricular Student Engagement activities are less likely to drop out at three HEIs (Sims et al, 2017). However, this does not mean that the converse is true.

I still feel that creating a summary of possible factors which influence performance analysis and a score for all students at HE is not the answer over practice, personal interaction and engaging each other on a personal basis, through representation, conversation and partnership. I think many members of the Student Engagement community will be sceptic to the significance and conclusions drawn from such data analytics activities as we reach an ever increasing ‘big data’ HE. We must ensure that HEIs do not forget the power of conversations with students as partners and the collective emphasis on Student Engagement which has been so prominent in recent years, which I have seen lead to genuine enhancement across HE at all levels.

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